



**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/686,506  
Filing Date: October 15, 2003  
Applicant: Michael A. Milligan et al.  
Group Art Unit: 1744  
Examiner: Terrence R. Till  
Title: IMPROVED HAND-HELD CORDLESS VACUUM  
CLEANER  
Attorney Docket: 0275U-000799

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Director of The United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

**DECLARATION UNDER 37 C.F.R. § 1.131**

Sir:

Michael A. Milligan, Patrick W. Mooney, Xianyao Shen, Ted A. Kimball  
and Andrew Walker hereby declare under penalty of perjury as follows:

- 1) We are the inventors who, on October 15, 2003, filed the above-identified application.
- 2) Prior to September 30, 2003, the invention as described and claimed in the subject application was conceived in the United States, a NAFTA country or a WTO country as evidenced by the following:
  - a. The subject matter claimed in the above-identified patent application having been earlier conceived and prior to September 30, 2003, Sean Wilkinson, a

co-worker and employee for Black & Decker Inc., forwarded to our patent attorney, Michael Zalobsky, two-dimensional drawings illustrating the subject matter that is claimed in the present application on September 15, 2003 at the request of Michael Milligan. Copies of these drawings are attached at Tab A.

- 4) From a time prior to September 17, 2003 to the filing of the present application on October 15, 2003, we were diligent in constructively reducing the invention to practice as evidenced by the following which occurred in the United States, a NAFTA country or a WTO country as evidenced by the following:
  - a. We received an initial draft of the present application from Michael Zalobsky on September 22, 2003 by e-mail. A copy of this correspondence is attached at Tab B.
  - d. We provided comments to Michael Zalobsky on September 30, 2003 by e-mail. A copy of this correspondence is attached at Tab C.
  - e. At our direction, Sean Wilkinson worked with Michael Zalobsky from October 1, 2003 through October 8, 2003 to provide two-dimensional drawings for the charging base that is disclosed in the present application. Copies of this correspondence is attached at Tab D.
  - f. We received a revised draft of the present application from Michael Zalobsky on October 14, 2003.
  - g. We provided comments to Michael Zalobsky on October 15, 2003 and the present application was filed that day.
- 5) We have never abandoned our application.
- 6) We hereby declare that all statements made herein of our own knowledge are true and that all statements made on information and belief are believed to be

true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 the United States Code, and that such willful false statement may jeopardize the validity of the application, and patent issuing thereon, or any patent to which this verified statement is directed.

Date: April 3, 2006

Michael A. Milligan  
Michael A. Milligan

Date: Apr. 3/06

Patrick W. Mooney  
Patrick W. Mooney

Date: \_\_\_\_\_

Xianyao Shen  
Xianyao Shen

Date: April 6/06

Ted A. Kimball  
Ted A. Kimball

Date: \_\_\_\_\_

Andrew Walker  
Andrew Walker

true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 the United States Code, and that such willful false statement may jeopardize the validity of the application, and patent issuing thereon, or any patent to which this verified statement is directed.

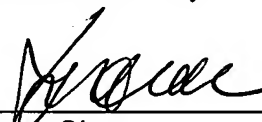
Date: \_\_\_\_\_

\_\_\_\_\_  
Michael A. Milligan

Date: \_\_\_\_\_

\_\_\_\_\_  
Patrick W. Mooney

Date: 05/19/2006

  
\_\_\_\_\_  
Xianyao Shen

Date: \_\_\_\_\_

\_\_\_\_\_  
Ted A. Kimball

Date: \_\_\_\_\_

\_\_\_\_\_  
Andrew Walker

true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 the United States Code, and that such willful false statement may jeopardize the validity of the application, and patent issuing thereon, or any patent to which this verified statement is directed.

Date: \_\_\_\_\_

\_\_\_\_\_  
Michael A. Milligan

Date: \_\_\_\_\_

\_\_\_\_\_  
Patrick W. Mooney

Date: \_\_\_\_\_

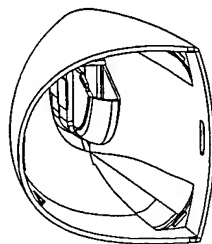
\_\_\_\_\_  
Xianyao Shen

Date: \_\_\_\_\_

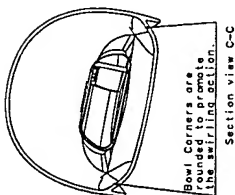
\_\_\_\_\_  
Ted A. Kimball

Date: 4<sup>th</sup> April 2006

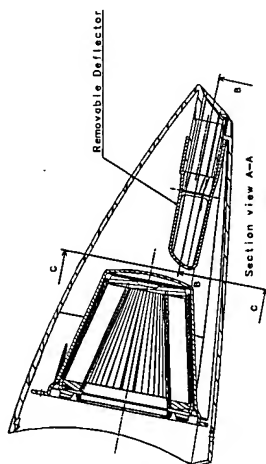
Andrew Walker  
Andrew Walker



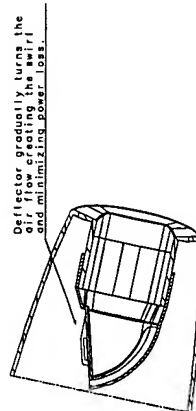
Isometric view with filters removed.



Section view C-C

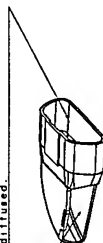


Section view A-A



Section view B-B

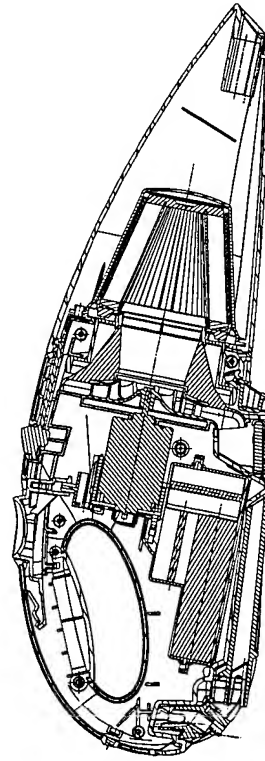
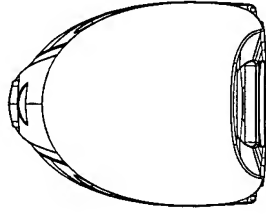
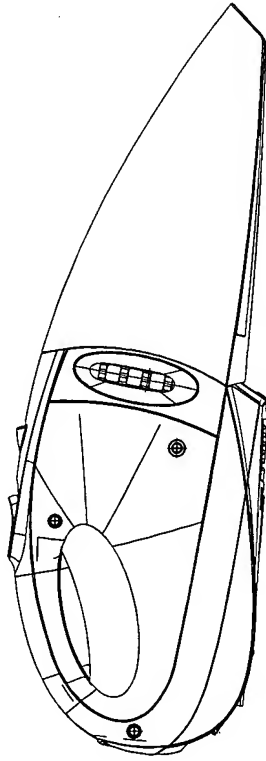
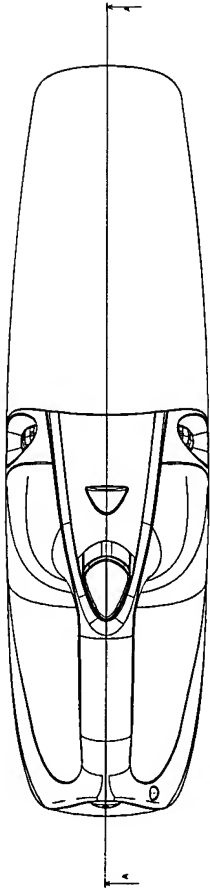
Deflector gradually turns the air flow creating the swirl and minimizing power loss.



isometric view

Deflector inlet is matched to Deflector outlet to ensure that the flow is not choked or diffused.

NOTES:



BLACK & BECKER INC.	
DOC NO: XXXX-XXXX	REV: X
TITLE: XXXXXX	EC: XXX
1 of 1	DEV

**Zalobsky, Mike**

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**From:** Zalobsky, Mike  
**Sent:** Monday, September 22, 2003 5:17 PM  
**To:** 'Milligan, Michael'; Wilkinson, Sean; Prosper, Jake  
**Cc:** 'Ratcliffe,Paul'  
**Subject:** Initial Draft of Detailed Description and Drawings for NG DustBuster  
**Attachments:** Detailed Description Draft.doc; drawings.pdf

\*\*\*\*\*ATTENTION\*\*\*\*\*

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Gentlemen -

I've attached an initial draft of the Detailed Description and drawings for the above-referenced patent application. Feel free to fax or e-mail your comments/suggestions/corrections and/or to give me a call to discuss.

<<Detailed Description Draft.doc>> <<drawings.pdf>>

\*\*\*\*\*

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Troy, MI 48098  
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(248) 641-1265 (direct)  
(248) 641-0270 (fax)  
mdzalobsky@hdp.com



## Zalobsky, Mike

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**From:** Milligan, Michael [Michael.Milligan@bdk.com]  
**Sent:** Tuesday, September 30, 2003 12:03 PM  
**To:** Zalobsky, Mike; Ratcliffe, Paul  
**Cc:** Prosper, Jake  
**Subject:** RE: DustBuster Application  
**Attachments:** draft\_comments\_30Sept03.doc

Mike,

I have finally taken a detailed look at the application info you sent. I used the text you sent on Sept 24, and the illustrations I was sent on Sept 29.

I don't think there are any major problems. I don't know if you would need to make all of the corrections for this first application, or if they can be ammended in later revisions.

One thing that is missing is illustrations of the charging base, and a description of the voltage interlocks. Again, I don't know if that could be added later, or in a different application.

If you need to discuss any of this, I should be available this afternoon, or later this week. You can phone me at (613) 498-9496, or contact Sarah Vaughan at (613) 498-9415 to locate me.

regards,  
Mike

-----Original Message-----

**From:** Zalobsky, Mike [mailto:mdzalobsky@HDP.com]  
**Sent:** Friday, September 26, 2003 6:04 PM  
**To:** Milligan, Michael  
**Cc:** Prosper, Jake  
**Subject:** DustBuster Application

\* \* \* \* \* ATTENTION \* \* \* \* \*

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\* \* \* \* \*

Mike -

**Zalobsky, Mike**

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**From:** Zalobsky, Mike  
**Sent:** Thursday, October 02, 2003 1:06 PM  
**To:** Wilkinson, Sean; 'Milligan, Michael'  
**Subject:** NG D/B Applications

\*\*\*\*\* ATTENTION \*\*\*\*\*

This message is confidential and intended only for the individual to whom or entity to which it is addressed. This message may contain information that is protected by the attorney/client privilege. If you are not the intended recipient or addressee, or an employee or agent responsible for delivering this message to the addressee, you are hereby notified that any dissemination, distribution, or copying, in whole or part, of this message is strictly prohibited. If you believe that you have been sent this message in error, please do not read it. Please immediately reply to sender that you have received this message in error. Then permanently delete all copies of the message. Thank you.

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Mike & Sean -

I've reviewed the materials that Sean sent over last night regarding the charger base and its "keying" to the vacuum to inhibit someone from charging the vacuum on a charger base having a voltage that is different from what is intended for the vacuum.

Given the interchangeability of the tooling (for the ribs and slots), I'm wondering if you guys have developed a family of DustBusters. If so, I'll need to know that, as well as whether or not any of the other family members has something different about its appearance. Any differences between the appearance of the family members would likely require additional design patent applications.

I contacted Paul this morning to request a change in the schedule - I'll let you know when I hear more.

\*\*\*\*\*

Michael D. Zalobsky  
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(248) 641-1265 (direct)  
(248) 641-0270 (fax)  
mdzalobsky@hdp.com

**Zalobsky, Mike**

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**From:** Wilkinson, Sean [Sean.Wilkinson@bdk.com]  
**Sent:** Wednesday, October 08, 2003 4:26 PM  
**To:** Wilkinson, Sean; Hood, Carrie; Milligan, Michael; Prosper, Jake; Ratcliffe,Paul; Zalobsky, Mike  
**Subject:** Next Gen Dustbuster  
**Attachments:** DBoct8visit.zip

All

Find attached a zip file containing Dustbuster drawings that were discussed with Paul Ratcliffe during his visit to Brockville. If anymore material is required do no hesitate to inquire.

Thank-You  
Sean Wilkinson